

REMARKS

Claims 28-101 are now pending in this application. Claims 1-27 have been canceled and new claims 83-101 have been added. Each of the pending claims is believed to define an invention which is novel and unobvious over the cited references. Favorable reconsideration of this case is respectfully requested.

New claims 83-101 have been added. The claims recite a file format for storing a specific type of data. As is known to one of ordinary skill in the art, a file when used in connection with computer systems is an entity of data available to users of the system that can be manipulated as an entity. For example, a file can be moved from computer to computer, directory to directory, transmitted over a network, etc. A file may be, for example, a Word document, which may be attached to an email and transmitted over a network to a recipient. All of the claims of the present application describe what is in the file and the format of the file.

In contrast, Crow describes the logical layout of a physical disk, such as a hard disk, and does not relate to a file. Crow describes that multiple storage disks may be arranged in a RAID configuration. See col. 3, lines 20-22. Data from the same file may be stored at different locations on the physical disk. Crow proposes a system for laying out the disk. Extents are used to map different segments of a file to different physical disks and partitions therein. This allows information to be inserted into a file without moving the physical location of the file on the disk. See col. 4, lines 9-12 and col. 5, lines 15-35 of Crow.

Consequently, it can be seen that the parts of the disk layout described in Crow are not comprised or contained in a file as is recited in the pending claims. This fundamental difference between the claims and Crow permeates through all of the rejections. A comparison of Crow to the claimed invention may be analogized to a comparison of apples and oranges, simply two unrelated items. Therefore the rejections of the claims should be withdrawn. A more detailed discussion of the rejections follows below.

New claims 83-101 more specifically recite the features of the claimed invention. For example, new independent claim 101 recites a CAD design file having a file format. The CAD design file includes elements representing items of the CAD design. The elements are variable size data records. Element chunks include groups of the elements. The element chunks have a unique name and a fixed header. The fixed header includes at least one of a number of elements in the element chunk, a compression scheme or an encryption scheme from the elements. The element chunks have variable sizes. A model includes groups of related element chunks and a model header stream. The model header stream includes at least one of a model name, units, or a geometric range for the model. A root storage includes at least one model and a control model.

None of the cited references teach or suggest this structural arrangement of a file. For example, the Crow reference does not teach or suggest elements representing items of a CAD design, the elements being variable sized data records, or element chunks including groups of the elements, the element chunks having a variable size.

The Office Action rejects claims 1, 2, 58, 60, 62, 66, 68, 70, 74, 76, 78, and 82 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,654,772 to Crow et al. Applicant respectfully traverses this rejection.

Crow describes data blocks 80-82, 84-85 92-94 having the same fixed size, for example 4K please see column 3, lines 64-65. Extent 65-66 can map file segments of different sizes to the different data blocks. A length field indicates the number of data blocks in the string of data blocks that stores the associated file segment. For example, if a file segment in Crow had a size of 30K, the length field would be, eight, indicating that the file segment would be stored in the string of eight data blocks each having a size of 4K. The number of data blocks that it takes to store a file segment does not correspond to a variable sized element. An element represents an item of a CAD design. Additionally, the blocks 80 of Crow are physical data blocks, see Crow column 3, lines 54-56. The claimed element chunk is not a physical data block, but instead provides an organization structure to store elements in groupings.

Additionally, the index nodes (INODES) of Crow map abstract file segments to physical data blocks, see Crow column 1, lines 28-30. The INODES taught by Crow do not correspond to the claimed fixed header for the element chunk. The INODES do not include at least one of a number of elements in the element chunk, a compression scheme, or an encryption scheme for the elements as is recited in the new claims.

Additionally, the cited references do not disclose, teach or suggest a model including groups of related element chunks and model header stream or element list including element chunks classified according to their meaning in the model as recited in independent claim 83 and claim 84.

It is respectfully submitted that Crow and the secondary references cited do not teach, suggest, or disclose at least the above discussed features of the claims.

Referring to Figures 5-7, for example, in an exemplary embodiment of the invention, each of said plurality of models 310 may comprise element list storages 311, 312 containing at least one element chunk 320. Each of the element chunks may comprise an element chunk header 325 and at least one element 330 that may be associated with its respective element chunk header 325. Within an element list storage (e.g., graphic element list 311 and control element list 312), individual elements may be stored in groupings, or element chunks 320. Each element may be given a unique name, for example so that chunks may be determined merely by iterating over the names in the element list. See, e.g., Specification, page 11, lines 3-8.

The Office Action rejects claims 3-5, 7, 15, 18, 27-29, 38-39, 43-44, 48-49, 53, 56-57, 59, 61, 67, 69, 75, and 77 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,654,772 to Crow et al. in view of U.S. Patent No. 5,506,983 to Atkinson et al. Applicant respectfully traverses this rejection.

Independent claims 28, 39, 58, 66 and 74 contain similar recitations as discussed above. Crow does not teach or suggest the recited features. Atkinson does not cure these deficiencies. Instead, Atkinson teaches an interface which an application program uses to manipulate compound

documents, see Abstract. Consequently, independent claims 3, 28, and 39 are allowable over the cited combination of Crow and Atkinson.

Claims 28-29, 38, 43-44, 48-49, 56-57, 59, 61, 67, 69, 75, 77 depend directly or indirectly from the aforementioned independent claims and are allowable as being dependent from an allowable claim.

In view of the above, Applicant respectfully requests that this rejection be withdrawn.

The Office Action rejects claims 8-9, 14, 19-20, 25, 31-32, 37, 40, 45, 54, 63-64, and 79-80 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,654,772 to Crow et al. in view of U.S. Patent No. 5,506,983 to Atkinson et al. and in further view of U.S. Patent No. 6,076,105 to Wolff et al. Applicant respectfully traverses this rejection.

Claims 19-20, 25, 31-32, 37, 40, 45, 54, 63-64, and 70 depend variously from independent claims 28, 39, 58, 66 and 74 and are patentable for at least the reasons discussed above regarding their base claims. As discussed above, Crow and Atkinson do not teach or suggest the features of the rejected claims. Wolff et al. does not supplement Crow and Atkinson to teach or suggest these features. Wolff et al. describes a system and method for distributing processes sufficiently over a high speed network of multiple computer host at network attached shared storage. Wolff et al. does not mention the claimed grouped storage, models and model directory.

In view of the above, Applicant respectfully requests that this rejection be withdrawn.

The Office Action rejects claims 6, 10-11, 16-17, 21-22, 26, 30, 33-34, 41, 46, 50-52, and 55 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,654,772 to Crow et al. in view of U.S. Patent No. 5,506,983 to Atkinson et al. and in further view of U.S. Patent Application Publication No. 2002/0194484 to Bolonsky et al. Applicant respectfully traverses this rejection.

The rejected claims depend variously from the independent claims discussed above and are patentable for at least the reasons discussed above regarding their base claims. As discussed above, Crow and Atkinson do not teach or suggest the features of the rejected claims. Bolonsky et al. does not supplement Crow and Atkinson to teach or suggest these features. Bolonsky does not mention the claimed grouped storage, models and model directory.

In view of the above, Applicant respectfully requests that this rejection be withdrawn.

The Office Action rejects claims 12-13, 23-24, 35-36, 42, and 47 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,654,772 to Crow et al. in view of U.S. Patent No. 5,506,983 to Atkinson et al. and in further view of U.S. Patent No. 6,076,105 to Wolff et al. and in further view of U.S. Patent Application Publication No. 2002/0194484 to Bolonsky et al. Applicant respectfully traverses this rejection.

The rejected claims depend variously from the independent claims discussed above and are patentable for at least the reasons discussed above regarding their base claims. As discussed above, Crow and Atkinson do not teach or suggest the features of the rejected claims. Wolff et al. and Bolonsky et al. do not supplement Crow and Atkinson to teach or suggest these features. Wolff et al. and Bolonsky et al. do not mention the claimed grouped storage, models and model directory.

In view of the above, Applicant respectfully requests that this rejection be withdrawn.

The Office Action rejects claims 63-64, 71-72, and 79-80 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,654,772 to Crow et al. in view of U.S. Patent No. 6,076,105 to Wolff et al. Applicant respectfully traverses this rejection.

The rejected claims depend variously from the independent claims discussed above and are patentable for at least the reasons discussed above regarding their base claims. As discussed above, Crow does not teach or suggest the features of the rejected claims. Wolff et al. does not supplement Crow to teach or suggest these features. Wolff et al. describes a system and method for distributing processes sufficiently over a high speed network of multiple computer host at network

attached shared storage. Wolff et al. does not mention the claimed grouped storage, models and model directory.

In view of the above, Applicant respectfully requests that this rejection be withdrawn.

The Office Action rejects claims 64, 72, and 80 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,654,772 to Crow et al. in view of U.S. Patent Application Publication No. 2002/0194484 to Bolonsky et al. Applicant respectfully traverses this rejection.

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In view of the above, Applicant respectfully requests that this rejection be withdrawn.

The Office Action rejects claims 65, 73, and 81 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,654,772 to Crow et al. in view of U.S. Patent Application Publication No. 2002/0194484 to Bolonsky et al. and in further view of U.S. Patent No. 6,076,105 to Wolff et al. Applicant respectfully traverses this rejection.

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In view of the above, Applicant respectfully requests that this rejection be withdrawn.

If the Examiner is of the opinion that the prosecution of this application would be advanced by a personal interview, the Examiner is invited to telephone undersigned counsel to arranged for such an interview.

The Commissioner is authorized to charge any fee necessitated by this Amendment to our Deposit Account No. 22-0261.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

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Respectfully submitted,

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